

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy										Date: May 2017		
Appropriation / Budget Activity / Budget Sub Activity: 1506N: Aircraft Procurement, Navy / BA 05: Modification of Aircraft / BSA 1: Modification of Aircraft							P-1 Line Item Number / Title: 0532 / H-1 Series					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0604245N				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	388.270	36.527	50.073	101.886	0.000	101.886	87.604	105.999	161.586	183.860	897.462	2,013.267
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	388.270	36.527	50.073	101.886	0.000	101.886	87.604	105.999	161.586	183.860	897.462	2,013.267
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	388.270	36.527	50.073	101.886	0.000	101.886	87.604	105.999	161.586	183.860	897.462	2,013.267
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This line item funds modifications to the UH-1Y and AH-1W/Z aircraft and related systems. The overall goals associated with these modifications are to reduce the total cost of ownership while improving ready-based aircraft and ready- for-tasking rates, eliminate safety hazards, improve survivability, fulfill operational requirements, remedy obsolescence, and sustain/improve mission capability in support of the Marine Air Ground Task Force and joint operations worldwide.

The H-1 Series modifications within this line item are grouped into three focus areas: H-1 Avionics Improvements (OSIP 015-12), H-1 Sensors and Weapons Improvements (OSIP 016-12), and H-1 Air Vehicle Improvements (OSIP 013-14).

The mission of the UH-1Y utility helicopter is to provide command and control and combat assault support under day/night and adverse weather conditions and special operations support: supporting arms coordination and aeromedical evacuation. The H-1 aircraft provide local civilian and military search and rescue support, as well as augmenting Department of Homeland Security resources. The AH-1W/Z are tandem-seat, two-place attack helicopters. The mission of the AH-1W/Z attack helicopter is to provide rotary wing close air support, anti-armor, armed escort, armed/visual reconnaissance, anti-helicopter and point air defense and fire support coordination during day/night conditions. The current armament of the AH-1W/Z includes the Sidewinder and Hellfire missile systems, a chin-mounted 20mm turret gun, and a wide variety of forward-firing and gravity-released external stores.

The aircraft inventory objective for the UH-1Y at the start of FY 2018 is projected to be 140 aircraft.
 The aircraft inventory objective for the AH-1Z at the start of FY 2018 is projected to be 86 aircraft.
 The aircraft inventory objective for the AH-1W at the start of FY 2018 is projected to be 81 aircraft.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: FY 2018 Navy								Date: May 2017		
Appropriation / Budget Activity / Budget Sub Activity: 1506N: Aircraft Procurement, Navy / BA 05: Modification of Aircraft / BSA 1: Modification of Aircraft						P-1 Line Item Number / Title: 0532 / H-1 Series				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0604245N				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	H-1 SENSORS AND WEAPONS IMPROVEMENTS (OSIP 016-12)				- / 68.083	- / 9.302	- / 6.644	- / 8.170	- / 0.000	- / 8.170
P-40a	INACTIVE OSIPS				- / 285.029	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-3a	1 / H-1 AVIONICS IMPROVEMENTS (OSIP 015-12) (Operational Improvement)				- / 20.995	- / 19.748	- / 36.288	- / 36.037	- / 0.000	- / 36.037
P-3a	3 / H-1 AIR VEHICLE IMPROVEMENTS (OSIP 013-14) (Safety/Reliability Improvements)				- / 14.163	- / 7.477	- / 7.141	- / 57.679	- / 0.000	- / 57.679
P-40	Total Gross/Weapon System Cost				- / 388.270	- / 36.527	- / 50.073	- / 101.886	- / 0.000	- / 101.886
Exhibits Schedule					FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	H-1 SENSORS AND WEAPONS IMPROVEMENTS (OSIP 016-12)				- / -	- / -	- / -	- / -	- / -	- / -
P-40a	INACTIVE OSIPS				- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / H-1 AVIONICS IMPROVEMENTS (OSIP 015-12) (Operational Improvement)				- / -	- / -	- / -	- / -	- / -	- / -
P-3a	3 / H-1 AIR VEHICLE IMPROVEMENTS (OSIP 013-14) (Safety/Reliability Improvements)				- / -	- / -	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost				- / 87.604	- / 105.999	- / 161.586	- / 183.860	- / 897.462	- / 2,013.267
<p>*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.</p> <p>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</p>										
<p>Justification: Basis for FY 2018 Budget Request: Funds are requested in FY 2018 for modifications to the UH-1Y and AH-1Z aircraft and related avionics, sensors, and weapons systems. Funds realigned between OSIPs in FYs 2015-2017 accelerated completion of BRITE Star BLK II modification to provide enhanced targeting capability in support of Marine Expeditionary Unit (MEU) deployments. The To Complete and Total columns are not properly reflected on the P40. The To Complete column should read \$882.462 vice \$897.462 and the Total column should read \$1,998.262 vice \$2,013.262.</p>										

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy																Date: May 2017				
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1							P-1 Line Item Number / Title: 0532 / H-1 Series							Aggregated Items Title: H-1 SENSORS AND WEAPONS IMPROVEMENTS (OSIP 016-12)						
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
A Kits/Non-Recurring																				
Archived Mods	A		75,383.33	180	13.569	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: A Kits/Non-Recurring			-	-	13.569	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B Kits/Recurring																				
BRITE Star BLK II Laser Spot Tracker (UH-1Y) -- Procurement	A		35,319.15	47	1.660	50,000.00	77	3.850	51,000.00	36	1.836	-	-	-	-	-	-	-	-	-
BRITE Star BLK II Laser Spot Tracker (UH-1Y) -- Installation	A		-	-	-	-	-	-	-	-	1.185	-	-	0.230	-	-	-	-	-	0.230
OTO Helmet Mounted Sight and Display Reliability Kit (UH-1Y/ AH-1Z)	A		2,145.00	200	0.429	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Archived Mods	A		869,297.87	47	40.857	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: B Kits/Recurring			-	-	42.946	-	-	3.850	-	-	3.021	-	-	0.230	-	-	-	-	-	0.230
B Kits/Non-Recurring																				
Installation Equipment N/R ⁽¹⁾	A		-	-	0.545	-	-	3.755	-	-	2.360	-	-	7.520	-	-	-	-	-	7.520
Subtotal: B Kits/Non-Recurring			-	-	0.545	-	-	3.755	-	-	2.360	-	-	7.520	-	-	-	-	-	7.520
Support Cost																				
Engineering Change Orders	A		-	-	1.352	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Data	A		-	-	1.546	-	-	0.387	-	-	0.309	-	-	-	-	-	-	-	-	-
ILS	A		-	-	3.946	-	-	0.402	-	-	0.412	-	-	0.210	-	-	-	-	-	0.210
Other Support ⁽²⁾	A		-	-	4.179	-	-	0.908	-	-	0.542	-	-	0.210	-	-	-	-	-	0.210
Subtotal: Support Cost			-	-	11.023	-	-	1.697	-	-	1.263	-	-	0.420	-	-	-	-	-	0.420
Total			-	-	68.083	-	-	9.302	-	-	6.644	-	-	8.170	-	-	0.000	-	-	8.170
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.																				
Remarks: Models of Systems Affected: UH-1Y, AH-1W/Z Type Modification: Operational Improvement																				
This Operational Safety and Improvement Program (OSIP) incorporates changes to H-1 sensor and weapon systems, specifically attacking the highest readiness degraders to reduce the total cost of ownership while improving ready-based aircraft and ready-for-tasking rates. Improvements to safety of flight, maintenance, obsolescence (Diminishing Manufacturing Sources/Material Shortages), and readiness degrader items will yield a more interoperable and survivable H-1 force to sustain warfighter capability in support of worldwide operations. Systems modified and improved on H-1 aircraft will leverage common architectures and utilize existing technology to the maximum extent practicable to minimize development and procurement costs and to reduce the time to field the modifications, while specifically addressing operational availability, enhanced capabilities, and interoperability of sensors to provide a target location of useable accuracy.																				
This OSIP addresses the U.S. Marine Corps' operational requirement to detect, identify, and destroy tactical-sized armored targets with the precision guided munitions during day, night, and adverse weather conditions. Sensor systems include the Target Sight System (TSS), and BRITE Star Block II, sensors that provide a night/adverse weather Forward-Looking Infrared and laser designation for the H-1 series helicopter. This OSIP also addresses improvements to H-1																				

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1	P-1 Line Item Number / Title: 0532 / H-1 Series	Aggregated Items Title: H-1 SENSORS AND WEAPONS IMPROVEMENTS (OSIP 016-12)
<p>series helicopters' weapons systems in support of mission success to include both air to ground and air to air missiles, rocket systems, 20mm turreted gun system reliability and weapons accuracy improvement efforts. These weapon systems include all Precision Guided Munitions, (Advanced Precision Kill Weapon System (APKWS), the Hellfire family of missiles, inclusive of the M299 Hellfire launcher and the Joint Air To Ground (JAGM), AIM-9X integration, the M197 20MM Turreted Gun System, associated Aviation Armament Equipment (AAE), 20MM Linkless Feed System (LFS), crew served weapons Helicopter Armament Systems (HAS), and the Digital Rocket Launcher (DRL). Other weapon and sensor improvements will include Weapons Repair Assembly (WRA's) modifications to improve weapons reliability, maintainability, systems stabilization and to address obsolescence. This OSIP will also address Helmet Mounted Sight and Display (HMSD) system, improvements to the Optimized Top Owl (OTO), Helmet Display Tracking System (HDTs), to include Night and Day Module Optic Reliability Improvements, helmet to aircraft integration improvements as well as helmet mapping improvements. For Sensor Improvements, this OSIP will address TSS Block Upgrades/Modifications to add a Laser Spot Tracker (LST) capability to detect, acquire and track laser designator signatures; Infra-Red (IR) laser pointing devices; add a high definition camera/telescope to increase detection, recognition, and identification ranges. This improvement will upgrade existing gimbal processors, optimize program security initiatives, address AC network and data link capabilities as well as improve upon overall HMSD, weapon and sensor boresighting to improve weapons accuracy. HMSD safety initiatives addressed by this OSIP include, but not limited to, spatial disorientation issues caused by Degraded Visual Environments (DVE), human factor improvements to helmet design, Integration and Optics improvements. Digital Interoperability and electronic warfare initiatives, such as the integration of the Intrepid Tiger (IT II) and APR-39D(V)2, will ensure the H-1 platform can effectively meet network ready requirements, allows the H-1 to be interoperable with other battle management systems, and provide aircrews with improved situational awareness.</p> <p>DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FY 2015 completed AFC-396 and BRITE Star BLK II, Target Sight System (TSS) Upgrade Kits- CREIU and IR Pointer, and Night Target System Upgrade (NTSU) Kit procurements. These critical fleet requirements provide enhanced targeting capabilities to support Marine Expeditionary Unit deployments.</p> <p>Footnotes:</p> <p>⁽¹⁾ Increase in FY 2018 Installation Equipment N/R required for Target Sight Sensor (TSS) Block Upgrade.</p> <p>⁽²⁾ Other Support includes validation/verification and engineering support for all modifications.</p>		

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy																Date: May 2017				
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1						P-1 Line Item Number / Title: 0532 / H-1 Series						Aggregated Items Title: INACTIVE OSIPS								
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
A Kits/Recurring																				
Inactive OSIPs	A		-	-	285.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: A Kits/Recurring			-	-	285.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	285.029	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.																				
Remarks: Inactive OSIPs prior year totals.																				

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy										Date: May 2017		
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1					P-1 Line Item Number / Title: 0532 / H-1 Series					Modification Number / Title: 1 / H-1 AVIONICS IMPROVEMENTS (OSIP 015-12)		
ID Code (A=Service Ready, B=Not Service Ready) :							MDAP/MAIS Code:					
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	20.995	19.748	36.288	36.037	0.000	36.037	-	-	-	-	-	-
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	20.995	19.748	36.288	36.037	0.000	36.037	-	-	-	-	-	-
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	20.995	19.748	36.288	36.037	0.000	36.037	-	-	-	-	-	-
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
<p>Description:</p> <p>This Operational Safety and Improvement Program (OSIP) incorporates changes to H-1 avionics systems, specifically attacking the highest readiness degraders to reduce the total cost of ownership while improving ready based aircraft and ready- for-tasking rates. Improvements to safety of flight, maintenance, obsolescence (Diminishing Manufacturing Sources/Material Shortages), and readiness degrader items will yield a more interoperable and survivable H-1 force to sustain warfighter capability in support of worldwide operations Systems modified and improved on H-1 aircraft will leverage common architectures and utilize existing technology to the maximum extent practicable to minimize development and procurement costs and to reduce the time to field the modifications.</p> <p>Specific systems associated with this OSIP are: Mission Computer, Digital Map, Flight Control Computer, Wiring Integration Remote Terminals, flight data recorders, maintenance data recorders, video recorders, Digital Video Recorders (DVR), data loaders, air data systems, Multi-Function Displays, Dual Function Displays, interoperable video and digital data links (Tactical Video Data Links and Full Motion Video (FMV)) for Variable Message Format with an Aircraft Network Switch, Data Transfer System and Data Storage Unit. Communication and navigation system updates are required for Ultra High Frequency/Very High Frequency radio communication systems, Satellite and Over the Horizon Communication systems, Mobile User Objective System (MUOS), Wireless Inter-Communications Systems (WICS), Identification Friend or Foe system, Embedded Global Positioning System (GPS) Inertial (EGI), Aircraft Dependent Surveillance Broadcast (ADS-B), Selective Availability Anti-Spoofing Module (SAASM), GPS non-precision approach capability and GPS signal protection efforts, radar altimeter, Blue Force Tracker, and Joint Battlefield Command - Platform (JBC-P). Safety system modifications are required for collision avoidance systems, Degraded Visual Environment, Ground Proximity Warning System, Terrain Awareness Warning System, Crash Survivable Flight Incident Recorder, Improved Vehicle Health and Monitoring System (IMD HUMS) and the Enhanced Digital Ground Station (EDGS) along with Military Flight Operations Quality Assurance and Distributed Aperture Infrared Countermeasures.</p> <p>System Configuration Set (SCS) updates are required for avionics component upgrades and interface modifications to ensure integration of platform weapons and sensors. Other focus areas will include Weapon Repairable Assembly modifications to improve avionics and weapons system reliability, maintainability, accuracy and interoperability.</p> <p>DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FMV Full Rate Production began in FY 2017.</p>												

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy								Date: May 2017				
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1				P-1 Line Item Number / Title: 0532 / H-1 Series				Modification Number / Title: 1 / H-1 AVIONICS IMPROVEMENTS (OSIP 015-12)				
ID Code (A=Service Ready, B=Not Service Ready) :						MDAP/MAIS Code:						
Models of Systems Affected: UH-1Y, AH-1W/Z			Modification Type: Operational Improvement					Related RDT&E PEs:				
Financial Plan (*) Indicates the modification is being installed organically and no installation funds are required.	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Procurement												
1.1.1) Digital Interoperability (UH-1Y/AH-1Z) - NonOrganic ⁽³⁾ Installation 1 of 4	- / -	- / -	1 / 0.104	1 / 0.106	- / -	1 / 0.106	- / -	- / -	- / -	- / -	- / -	- / -
1.1.2) Full Motion Video (FMV) (UH-1Y/AH-1Z) - NonOrganic ⁽⁴⁾ Installation 2 of 4	12 / 0.960	20 / 1.610	42 / 3.402	33 / 2.690	- / -	33 / 2.690	- / -	- / -	- / -	- / -	- / -	- / -
1.1.4) Aircraft Network Switch (ANS) (UH-1Y/AH-1Z) - NonOrganic Installation 3 of 4	- / -	- / -	5 / 0.013	24 / 0.072	- / -	24 / 0.072	- / -	- / -	- / -	- / -	- / -	- / -
1.1.5) Advanced Data Transfer System (ADTS) (UH-1Y/AH-1Z) - NonOrganic Installation 4 of 4	- / -	- / -	5 / 0.055	24 / 0.276	- / -	24 / 0.276	- / -	- / -	- / -	- / -	- / -	- / -
1.1.6) Digital Video Recorder (DVR) (UH-1Y/AH-1Z) - Organic ^(*)	- / -	70 / 0.275	16 / 0.065	27 / 0.116	- / -	27 / 0.116	- / -	- / -	- / -	- / -	- / -	- / -
1.1.7) Distributed Aperture Infrared Countermeasures (DAIRCM) (UH-1Y/AH-1Z) - Organic ^(*)	- / -	- / -	9 / 3.740	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
1.1.9) Archived Mods - Organic ^(*)	8 / 3.235	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
1.2.1) Installation Kits N/R - Organic ^{(*) (5)}	- / 3.047	- / 2.900	- / 0.168	- / 0.771	- / -	- / 0.771	- / -	- / -	- / -	- / -	- / -	- / -
2.1.1) Digital Interoperability (UH-1Y/AH-1Z) - Organic ^(*)	- / -	- / -	1 / 0.104	1 / 0.106	- / -	1 / 0.106	- / -	- / -	- / -	- / -	- / -	- / -
2.1.2) Full Motion Video (FMV) (UH-1Y/AH-1Z) - Organic ^(*)	12 / 2.736	20 / 4.560	42 / 9.618	33 / 7.590	- / -	33 / 7.590	- / -	- / -	- / -	- / -	- / -	- / -
2.1.4) Aircraft Network Switch (ANS) (UH-1Y/AH-1Z) - Organic ^(*)	- / -	- / -	5 / 0.033	24 / 0.168	- / -	24 / 0.168	- / -	- / -	- / -	- / -	- / -	- / -
2.1.5) Advanced Data Transfer System (ADTS) (UH-1Y/AH-1Z) - Organic ^(*)	- / -	- / -	5 / 0.408	24 / 1.968	- / -	24 / 1.968	- / -	- / -	- / -	- / -	- / -	- / -
2.1.6) Digital Video Recorder (DVR) (UH-1Y/AH-1Z) - Organic ^{(*) (6)}	- / -	183 / 3.255	36 / 0.790	48 / 1.100	- / -	48 / 1.100	- / -	- / -	- / -	- / -	- / -	- / -
2.1.7) Tech Refresh Mission Computer (TRMC) Retrofit (UH-1Y/ AH-1Z) - Organic ^(*)	- / -	- / -	- / -	40 / 8.120	- / -	40 / 8.120	- / -	- / -	- / -	- / -	- / -	- / -
2.1.8) SATCOM Improvements (UH-1Y) - Organic ^(*)	- / -	- / -	320 / 0.070	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
2.1.9) ARC-210 1939A (UH-1Y/AH-1Z) - Organic ^(*)	- / -	311 / 2.999	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
2.2.1) Installation Equipment N/R - Organic ^{(*) (7)}	- / 4.953	- / 2.797	- / 6.151	- / 5.232	- / -	- / 5.232	- / -	- / -	- / -	- / -	- / -	- / -
Subtotal: Procurement	- / 14.931	- / 18.396	- / 24.721	- / 28.315	- / -	- / 28.315	- / -	- / -	- / -	- / -	- / -	- / -
Support												
3.1) Engineering Change Orders	- / 0.001	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
3.2) Data ⁽⁸⁾	- / 0.685	- / 0.562	- / 0.573	- / 0.239	- / -	- / 0.239	- / -	- / -	- / -	- / -	- / -	- / -

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy										Date: May 2017			
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1					P-1 Line Item Number / Title: 0532 / H-1 Series					Modification Number / Title: 1 / H-1 AVIONICS IMPROVEMENTS (OSIP 015-12)			
ID Code (A=Service Ready, B=Not Service Ready) :							MDAP/MAIS Code:						
Models of Systems Affected: UH-1Y, AH-1W/Z				Modification Type: Operational Improvement				Related RDT&E PEs:					
Financial Plan <small>(*) Indicates the modification is being installed organically and no installation funds are required.</small>	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total	
	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	
3.3) Training Equipment ⁽⁹⁾	- / -	- / 0.060	- / 0.095	- / 0.096	- / -	- / 0.096	- / -	- / -	- / -	- / -	- / -	- / -	
3.4) Support Equipment	- / -	- / 0.400	- / 0.125	- / 0.105	- / -	- / 0.105	- / -	- / -	- / -	- / -	- / -	- / -	
3.5) ILS ⁽¹⁰⁾	- / 0.170	- / 0.170	- / 0.175	- / 0.276	- / -	- / 0.276	- / -	- / -	- / -	- / -	- / -	- / -	
3.6) Other Support ⁽¹¹⁾	- / 3.288	- / 0.160	- / 0.489	- / 0.763	- / -	- / 0.763	- / -	- / -	- / -	- / -	- / -	- / -	
<i>Subtotal: Support</i>	<i>- / 4.144</i>	<i>- / 1.352</i>	<i>- / 1.457</i>	<i>- / 1.479</i>	<i>- / -</i>	<i>- / 1.479</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	
Installation													
<i>Installation 1 of 4:</i> Digital Interoperability (UH-1Y/AH-1Z)	- / -	- / -	- / 0.015	- / 0.016	- / 0.000	- / 0.016	- / -	- / -	- / -	- / -	- / -	- / 0.031	
<i>Installation 2 of 4:</i> Full Motion Video (FMV) (UH-1Y/AH-1Z)	- / 1.920	- / -	- / 9.920	- / 5.363	- / 0.000	- / 5.363	- / -	- / -	- / -	- / -	- / -	- / 17.203	
<i>Installation 3 of 4:</i> Aircraft Network Switch (ANS) (UH-1Y/AH-1Z)	- / -	- / -	- / 0.050	- / 0.252	- / 0.000	- / 0.252	- / -	- / -	- / -	- / -	- / -	- / 0.302	
<i>Installation 4 of 4:</i> Advanced Data Transfer System (ADTS) (UH-1Y/AH-1Z)	- / -	- / -	- / 0.125	- / 0.612	- / 0.000	- / 0.612	- / -	- / -	- / -	- / -	- / -	- / 0.737	
<i>Subtotal: Installation</i>	<i>- / 1.920</i>	<i>- / -</i>	<i>- / 10.110</i>	<i>- / 6.243</i>	<i>- / -</i>	<i>- / 6.243</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	<i>- / -</i>	
Total													
Total Cost (Procurement + Support + Installation)	20.995	19.748	36.288	36.037	0.000	36.037	-	-	-	-	-	-	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy										Date: May 2017																					
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1										P-1 Line Item Number / Title: 0532 / H-1 Series										Modification Number / Title: 1 / H-1 AVIONICS IMPROVEMENTS (OSIP 015-12)											
ID Code (A=Service Ready, B=Not Service Ready) :															MDAP/MAIS Code:																
Installation 1 of 4: Digital Interoperability (UH-1Y/AH-1Z)																															
Manufacturer Information																															
Manufacturer Name: TBD -Digital Interoperability															Manufacturer Location: TBD																
Administrative Leadtime <i>(in Months)</i> : 1															Production Leadtime <i>(in Months)</i> : 3																
Dates		FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022					
Contract Dates						Oct 2016				Oct 2017																					
Delivery Dates						Jan 2017				Jan 2018																					
Installation Information																															
Method of Implementation: Contractor Field Mod Team:: Installation Name: Digital Interoperability (UH-1Y/AH-1Z)																															
Installation Cost		Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total		FY 2019		FY 2020		FY 2021		FY 2022		To Complete		Total							
		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)							
Prior Years		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2016		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2017		- / -		- / -		1 / 0.015		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		1 / 0.015					
FY 2018		- / -		- / -		- / -		1 / 0.016		0 / 0.000		1 / 0.016		- / -		- / -		- / -		- / -		- / -		- / -		1 / 0.016					
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2021		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2022		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
Total		- / -		- / -		1 / 0.015		1 / 0.016		0 / 0.000		1 / 0.016		- / -		- / -		- / -		- / -		- / -		- / -		2 / 0.031					
Installation Schedule																															
	PYS	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Out	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy										Date: May 2017																					
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1										P-1 Line Item Number / Title: 0532 / H-1 Series										Modification Number / Title: 1 / H-1 AVIONICS IMPROVEMENTS (OSIP 015-12)											
ID Code (A=Service Ready, B=Not Service Ready) :															MDAP/MAIS Code:																
Installation 2 of 4: Full Motion Video (FMV) (UH-1Y/AH-1Z)																															
Manufacturer Information																															
Manufacturer Name: JF Taylor- Full Motion Video															Manufacturer Location: Patuxent River, Md																
Administrative Leadtime (<i>in Months</i>): 1															Production Leadtime (<i>in Months</i>): 5																
Dates		FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022					
Contract Dates		Oct 2015				Oct 2016				Oct 2017																					
Delivery Dates		Mar 2016				Mar 2017				Mar 2018																					
Installation Information																															
Method of Implementation: Contractor Field Mod Team:: Installation Name: Full Motion Video (FMV) (UH-1Y/AH-1Z)																															
Installation Cost		Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total		FY 2019		FY 2020		FY 2021		FY 2022		To Complete		Total							
		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)							
Prior Years		12 / 1.920		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		12 / 1.920					
FY 2016		- / -		- / -		20 / 3.200		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		20 / 3.200					
FY 2017		- / -		- / -		42 / 6.720		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		42 / 6.720					
FY 2018		- / -		- / -		- / -		33 / 5.363		0 / 0.000		33 / 5.363		- / -		- / -		- / -		- / -		- / -		- / -		33 / 5.363					
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2021		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2022		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
Total		12 / 1.920		- / -		62 / 9.920		33 / 5.363		0 / 0.000		33 / 5.363		- / -		- / -		- / -		- / -		- / -		- / -		107 / 17.203					
Installation Schedule																															
	PYS	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	12	-	-	-	-	-	20	21	21	-	11	11	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Out	8	4	-	-	-	-	-	20	21	21	-	11	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy										Date: May 2017																					
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1										P-1 Line Item Number / Title: 0532 / H-1 Series										Modification Number / Title: 1 / H-1 AVIONICS IMPROVEMENTS (OSIP 015-12)											
ID Code (A=Service Ready, B=Not Service Ready) :															MDAP/MAIS Code:																
Installation 3 of 4: Aircraft Network Switch (ANS) (UH-1Y/AH-1Z)																															
Manufacturer Information																															
Manufacturer Name: Bell Helicopter-Aircraft Network Switch															Manufacturer Location: Dallas, TX																
Administrative Leadtime (in Months): 1															Production Leadtime (in Months): 5																
Dates		FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022					
Contract Dates						Oct 2016				Oct 2017																					
Delivery Dates						Mar 2017				Mar 2018																					
Installation Information																															
Method of Implementation: Contractor Field Mod Team:: Installation Name: Aircraft Network Switch (ANS) (UH-1Y/AH-1Z)																															
Installation Cost		Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total		FY 2019		FY 2020		FY 2021		FY 2022		To Complete		Total							
		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)							
Prior Years		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2016		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2017		- / -		- / -		5 / 0.050		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		5 / 0.050					
FY 2018		- / -		- / -		- / -		18 / 0.252		0 / 0.000		18 / 0.252		- / -		- / -		- / -		- / -		- / -		- / -		18 / 0.252					
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2021		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2022		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
Total		- / -		- / -		5 / 0.050		18 / 0.252		0 / 0.000		18 / 0.252		- / -		- / -		- / -		- / -		- / -		- / -		23 / 0.302					
Installation Schedule																															
	PYS	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	5	-	-	-	6	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Out	-	-	-	-	-	-	5	-	-	-	6	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1	P-1 Line Item Number / Title: 0532 / H-1 Series	Modification Number / Title: 1 / H-1 AVIONICS IMPROVEMENTS (OSIP 015-12)

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
---	------------------------

Installation 4 of 4: Advanced Data Transfer System (ADTS) (UH-1Y/AH-1Z)

Manufacturer Information

Manufacturer Name: TBD-Advanced Data Transfer System	Manufacturer Location: TBD
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 5

Dates	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Contract Dates			Oct 2017				
Delivery Dates			Mar 2018				

Installation Information

Method of Implementation: Contractor Field Mod Team:: Installation Name: Advanced Data Transfer System (ADTS) (UH-1Y/AH-1Z)

Installation Cost	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	5 / 0.125	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.125
FY 2018	- / -	- / -	- / -	18 / 0.612	0 / 0.000	18 / 0.612	- / -	- / -	- / -	- / -	- / -	18 / 0.612
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	5 / 0.125	18 / 0.612	0 / 0.000	18 / 0.612	- / -	- / -	- / -	- / -	- / -	23 / 0.737

Installation Schedule

	PYS	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	5	-	-	-	6	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Out	-	-	-	-	-	-	5	-	-	-	6	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Footnotes:

⁽³⁾ Digital Interoperability (DI) adds digitally-aided close air support and Variable Message Format capabilities to the UH-1Y and AH-1Z.

⁽⁴⁾ Full Motion Video (FMV) supports UUNS CDTs# 11061UA validated by MROC DM 49-2012 and provides video evidence to battlespace commanders realtime in order to make decisions to engage targets and assess battle damage. FMV is necessary to ensure digital interoperability on the platform.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1	P-1 Line Item Number / Title: 0532 / H-1 Series	Modification Number / Title: 1 / H-1 AVIONICS IMPROVEMENTS (OSIP 015-12)
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
<p>⁽⁵⁾ Increase in FY 2018 and FY 2019 Installation Equipment N/R is required for EGI engineering.</p> <p>⁽⁶⁾ Digital Video Recorder (DVR) B Kit Qtys include DVR and Removable Mass Memory Devices (RMMDs).</p> <p>⁽⁷⁾ FY 2017 and FY 2018 Installation Equipment N/R required for FMV forward antenna engineering and increased metadata for mission computer to allow for increased coverage of the system; and Flight Control Computer (FCC) safety issues including aircraft cooling and unit degradation. Increase in FY 2018 and FY 2019 Installation Equipment N/R is required for EGI engineering.</p> <p>⁽⁸⁾ FY 2016 and FY 2017 Data required for Digital Interoperability (DI), Full Motion Video (FMV), Aircraft Network Switch (ANS), Advanced Data Transfer System (ADTS). FY 2019 Data is required for Embedded GPS Inertial (EGI).</p> <p>⁽⁹⁾ FY 2017 and FY 2018 Training required for maintenance and operator training to support Digital Interoperability (DI), Full Motion Video (FMV), Aircraft Network Switch (ANS), Advanced Data Transfer System (ADTS).</p> <p>⁽¹⁰⁾ FY 2017 thru FY 2019 ILS required to support Digital Interoperability (DI), Full Motion Video (FMV), Aircraft Network Switch (ANS), Advanced Data Transfer System (ADTS), and Embedded GPS Inertial (EGI).</p> <p>⁽¹¹⁾ Other Support includes validation/verification and engineering support for all modifications.</p>		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy										Date: May 2017		
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1					P-1 Line Item Number / Title: 0532 / H-1 Series					Modification Number / Title: 3 / H-1 AIR VEHICLE IMPROVEMENTS (OSIP 013-14)		
ID Code (A=Service Ready, B=Not Service Ready) :							MDAP/MAIS Code:					
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	14.163	7.477	7.141	57.679	0.000	57.679	-	-	-	-	-	-
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	14.163	7.477	7.141	57.679	0.000	57.679	-	-	-	-	-	-
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	14.163	7.477	7.141	57.679	0.000	57.679	-	-	-	-	-	-
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
<p>Description:</p> <p>This Operational Safety and Improvement Program (OSIP) incorporates a number of modifications to H-1 air vehicle systems, specifically attacking the highest readiness degraders to reduce the total cost of ownership while improving ready-based aircraft and ready- for-tasking rates. Improvements to safety of flight, maintenance, obsolescence (Diminishing Manufacturing Sources/Material Shortages), and readiness degrader items will yield a more interoperable and survivable H-1 force to sustain warfighter capability in support of worldwide operations.</p> <p>Planned modifications under this OSIP cover airframes (structural and air vehicle systems), propulsion, survivability, reliability and maintainability, fuel systems, electrical power, drives, engines, rotors, flying qualities, flight controls, human factors, systems thermodynamics, and weight and balance. Particular focus is on continuously reducing total ownership costs by increasing component time on the aircraft. During full scale development testing of the H-1 Upgrades aircraft, data evaluation showed that incorporation of redesigned components applicable to the critical load paths will significantly increase the service life of the aircraft and components to meet the life limit of 10,000 flight hours. Safety programs that will be implemented by this OSIP include, but are not limited to, designated safety-related items, door and hatch latches/hardware, external lights, and mission grip mounts.</p> <p>Reliability and maintainability modification items that will be implemented by this OSIP include, but are not limited to, the aircraft electrical system, power distribution system, canopy frame, bushings, doors, blade fold rack, gearboxes, standpipes, fuselage/cabin/seats, external lights, engine mount and tail boom bearings, main and tail rotor components, aircraft Nickel Cadmium battery, hydraulic distribution, weight reduction initiatives, swashplate, integrated mechanical diagnostic system, clearances, main/tail rotor, materials, drive system, systems heating/cooling, corrosion/water intrusion control, cold spray, rotor blade and gun turret covers, cargo hooks, engine cowlings, skid tubes, and airframe structural robustness. Specific Dynamic Component Reliability improvements include improvements/upgrades to: rotor brake system, MRGB PC2 pump quill, desiccant breather, input quills, MRGB tiltball, and main rotor mast.</p> <p>Airframe (structural and air vehicle systems) modification items that will be implemented by this OSIP include, but are not limited to, access panels. Survivability modification items that will be implemented by this OSIP include, but are not limited to, Improved Defensive Armament System (IDAS) for carrying stores (UH-1Y machine guns, rocket pods, fuel tanks, etc.), and armored flooring. Fuel systems modification items that will be implemented by this OSIP include, but are not limited to, fuel cells. Electrical power modification items that will be implemented by this OSIP include, but are not limited to, generators and inverters.</p> <p>Other modifications include: Health Usage Monitoring System, tail boom wiring, swash plate assembly, clamp ring assembly, UH-1Y floor panel/belly access and water intrusion abatement, composite elevator, Environmental Control System, tail boom assembly, aircraft main rotor blades, gearboxes, lighting, drives, door latches, canopy, wiring, gearboxes, structural, and Mission Aircrew Restraint System (MARS).</p>												

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy									Date: May 2017				
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1				P-1 Line Item Number / Title: 0532 / H-1 Series					Modification Number / Title: 3 / H-1 AIR VEHICLE IMPROVEMENTS (OSIP 013-14)				
ID Code (A=Service Ready, B=Not Service Ready) :							MDAP/MAIS Code:						
Models of Systems Affected: UH-1Y, AH-1W/Z			Modification Type: Safety/Reliability Improvements					Related RDT&E PEs:					
Financial Plan (*) Indicates the modification is being installed organically and no installation funds are required.	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
1.1.1) Tail Boom Clamp and Retainer Mod (UH-1Y/AH-1Z) - NonOrganic Installation 1 of 4	45 / 0.413	15 / 0.218	15 / 0.222	4 / 0.060	- / -	4 / 0.060	- / -	- / -	- / -	- / -	- / -	- / -	
1.1.2) Standpipe Improvements (UH-1Y/AH-1Z) - Organic ^(*)	- / -	75 / 0.225	52 / 0.159	52 / 0.166	- / -	52 / 0.166	- / -	- / -	- / -	- / -	- / -	- / -	
1.1.3) MRGB Pylon Strap Rivets (UH-1Y) - NonOrganic Installation 2 of 4	23 / 0.003	4 / 0.001	10 / 0.002	10 / 0.002	- / -	10 / 0.002	- / -	- / -	- / -	- / -	- / -	- / -	
1.1.4) Heat Exchange Airframe Mounting Mod (UH-1Y/AH-1Z) - Organic ^(*)	- / -	40 / 0.184	24 / 0.113	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
1.1.5) Tail Rotor Drive Shaft (TRDS) Clearance Improvements (UH-1Y/AH-1Z) - Organic ^(*)	- / -	- / -	- / -	50 / 0.475	- / -	50 / 0.475	- / -	- / -	- / -	- / -	- / -	- / -	
1.1.6) Tailboom Stinger (UH-1Y/AH-1Z) - NonOrganic Installation 3 of 4	- / -	15 / 0.100	20 / 0.136	15 / 0.110	- / -	15 / 0.110	- / -	- / -	- / -	- / -	- / -	- / -	
1.1.7) Cargo Door Latch (UH-1Y) - NonOrganic Installation 4 of 4	- / -	- / -	- / -	2 / 0.073	- / -	2 / 0.073	- / -	- / -	- / -	- / -	- / -	- / -	
1.2.1) Installation Kits N/R - Organic ^(*) (12)	- / -	- / 1.589	- / 0.480	- / 1.325	- / -	- / 1.325	- / -	- / -	- / -	- / -	- / -	- / -	
2.1.1) External Lights (AH-1Z) - Organic ^(*)	70 / 3.492	17 / 0.901	13 / 0.733	20 / 1.130	- / -	20 / 1.130	- / -	- / -	- / -	- / -	- / -	- / -	
2.1.2) External Lights (UH-1Y) - Organic ^(*)	143 / 6.639	3 / 0.140	10 / 0.469	4 / 0.219	- / -	4 / 0.219	- / -	- / -	- / -	- / -	- / -	- / -	
2.1.3) Mission Grip Mount (AH-1Z) - Organic ^(*)	70 / 0.166	28 / 0.078	25 / 0.070	22 / 0.065	- / -	22 / 0.065	- / -	- / -	- / -	- / -	- / -	- / -	
2.1.4) T700-401C (AH-1Z Reman) - Organic ^(*)	- / -	- / -	- / -	25 / 42.000	- / -	25 / 42.000	- / -	- / -	- / -	- / -	- / -	- / -	
2.1.8) MRGB PC2 Pump Quill (UH-1Y/AH-1Z) - Organic ^(*)	- / -	- / -	- / -	40 / 0.600	- / -	40 / 0.600	- / -	- / -	- / -	- / -	- / -	- / -	
2.1.9) Rotor Brake System (UH-1Y/AH-1Z) - Organic ^(*)	- / -	- / -	- / -	5 / 1.250	- / -	5 / 1.250	- / -	- / -	- / -	- / -	- / -	- / -	
2.1.10) Desiccant Breather (UH-1Y/AH-1Z) - Organic ^(*)	- / -	- / -	- / -	50 / 0.100	- / -	50 / 0.100	- / -	- / -	- / -	- / -	- / -	- / -	
2.1.11) Input Quills (UH-1Y/AH-1Z) - Organic ^(*)	- / -	- / -	- / -	10 / 0.100	- / -	10 / 0.100	- / -	- / -	- / -	- / -	- / -	- / -	
2.2.1) Installation Equipment N/R - Organic ^(*) (13)	- / 1.633	- / 2.723	- / 3.292	- / 7.955	- / -	- / 7.955	- / -	- / -	- / -	- / -	- / -	- / -	
Subtotal: Procurement	- / 12.346	- / 6.159	- / 5.676	- / 55.630	- / -	- / 55.630	- / -	- / -	- / -	- / -	- / -	- / -	
Support													
3.2) Data	- / -	- / 0.067	- / 0.304	- / 0.310	- / -	- / 0.310	- / -	- / -	- / -	- / -	- / -	- / -	
3.4) Support Equipment	- / 0.292	- / -	- / 0.030	- / 0.094	- / -	- / 0.094	- / -	- / -	- / -	- / -	- / -	- / -	
3.5) ILS	- / 0.155	- / 0.235	- / 0.347	- / 0.550	- / -	- / 0.550	- / -	- / -	- / -	- / -	- / -	- / -	
3.6) Other Support ⁽¹⁴⁾	- / 1.047	- / 0.720	- / 0.375	- / 0.789	- / -	- / 0.789	- / -	- / -	- / -	- / -	- / -	- / -	
Subtotal: Support	- / 1.494	- / 1.022	- / 1.056	- / 1.743	- / -	- / 1.743	- / -	- / -	- / -	- / -	- / -	- / -	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy										Date: May 2017			
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1					P-1 Line Item Number / Title: 0532 / H-1 Series					Modification Number / Title: 3 / H-1 AIR VEHICLE IMPROVEMENTS (OSIP 013-14)			
ID Code (A=Service Ready, B=Not Service Ready) :								MDAP/MAIS Code:					
Models of Systems Affected: UH-1Y, AH-1W/Z				Modification Type: Safety/Reliability Improvements				Related RDT&E PEs:					
Financial Plan <small>(*) Indicates the modification is being installed organically and no installation funds are required.</small>	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total	
	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	<small>Qty (Each) / Total Cost (\$ M)</small>	
Installation													
<i>Installation 1 of 4:</i> Tail Boom Clamp and Retainer Mod (UH-1Y/AH-1Z)	- / 0.195	- / 0.149	- / 0.164	- / 0.045	- / 0.000	- / 0.045	- / -	- / -	- / -	- / -	- / -	- / 0.553	
<i>Installation 2 of 4:</i> MRGB Pylon Strap Rivets (UH-1Y)	- / 0.128	- / 0.042	- / 0.105	- / 0.112	- / 0.000	- / 0.112	- / -	- / -	- / -	- / -	- / -	- / 0.387	
<i>Installation 3 of 4:</i> Tailboom Stinger (UH-1Y/AH-1Z)	- / -	- / 0.105	- / 0.140	- / 0.109	- / 0.000	- / 0.109	- / -	- / -	- / -	- / -	- / -	- / 0.354	
<i>Installation 4 of 4:</i> Cargo Door Latch (UH-1Y)	- / -	- / -	- / -	- / 0.040	- / 0.000	- / 0.040	- / -	- / -	- / -	- / -	- / -	- / 0.040	
<i>Subtotal: Installation</i>	- / 0.323	- / 0.296	- / 0.409	- / 0.306	- / -	- / 0.306	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	14.163	7.477	7.141	57.679	0.000	57.679	-	-	-	-	-	-	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy										Date: May 2017																					
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1										P-1 Line Item Number / Title: 0532 / H-1 Series										Modification Number / Title: 3 / H-1 AIR VEHICLE IMPROVEMENTS (OSIP 013-14)											
ID Code (A=Service Ready, B=Not Service Ready) :															MDAP/MAIS Code:																
Installation 1 of 4: Tail Boom Clamp and Retainer Mod (UH-1Y/AH-1Z)																															
Manufacturer Information																															
Manufacturer Name: Depot - Tail Boom Clamp and Retainer Mod															Manufacturer Location: North Carolina																
Administrative Leadtime (in Months): 1															Production Leadtime (in Months): 3																
Dates		FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022					
Contract Dates		Oct 2015				Oct 2016				Oct 2017																					
Delivery Dates		Jan 2016				Jan 2017				Jan 2018																					
Installation Information																															
Method of Implementation: Depot Modification Team:: Installation Name: Tail Boom Clamp and Retainer Mod (UH-1Y/AH-1Z)																															
Installation Cost		Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total		FY 2019		FY 2020		FY 2021		FY 2022		To Complete		Total								
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)								
Prior Years		45 / 0.195		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		45 / 0.195							
FY 2016		- / -		15 / 0.149		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		15 / 0.149							
FY 2017		- / -		- / -		15 / 0.164		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		15 / 0.164							
FY 2018		- / -		- / -		- / -		4 / 0.045		0 / 0.000		4 / 0.045		- / -		- / -		- / -		- / -		- / -		4 / 0.045							
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -							
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -							
FY 2021		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -							
FY 2022		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -							
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -							
Total		45 / 0.195		15 / 0.149		15 / 0.164		4 / 0.045		0 / 0.000		4 / 0.045		- / -		- / -		- / -		- / -		- / -		79 / 0.553							
Installation Schedule																															
	PYS	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	45	-	5	5	5	-	5	5	5	-	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Out	45	-	5	5	5	-	5	5	5	-	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy										Date: May 2017																					
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1										P-1 Line Item Number / Title: 0532 / H-1 Series										Modification Number / Title: 3 / H-1 AIR VEHICLE IMPROVEMENTS (OSIP 013-14)											
ID Code (A=Service Ready, B=Not Service Ready) :															MDAP/MAIS Code:																
Installation 2 of 4: MRGB Pylon Strap Rivets (UH-1Y)																															
Manufacturer Information																															
Manufacturer Name: Depot - MRGB Plyon Strap Rivets															Manufacturer Location: North Carolina																
Administrative Leadtime <i>(in Months)</i> : 1															Production Leadtime <i>(in Months)</i> : 6																
Dates		FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022					
Contract Dates		Oct 2015				Oct 2016				Oct 2017																					
Delivery Dates		Apr 2016				Apr 2017				Apr 2018																					
Installation Information																															
Method of Implementation: Depot Modification Team:: Installation Name: MRGB Pylon Strap Rivets (UH-1Y)																															
Installation Cost		Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total		FY 2019		FY 2020		FY 2021		FY 2022		To Complete		Total								
		<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>								
Prior Years		23 / 0.128		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		23 / 0.128							
FY 2016		- / -		4 / 0.042		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		4 / 0.042							
FY 2017		- / -		- / -		10 / 0.105		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		10 / 0.105							
FY 2018		- / -		- / -		- / -		10 / 0.112		0 / 0.000		10 / 0.112		- / -		- / -		- / -		- / -		- / -		10 / 0.112							
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -							
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -							
FY 2021		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -							
FY 2022		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -							
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -							
Total		23 / 0.128		4 / 0.042		10 / 0.105		10 / 0.112		0 / 0.000		10 / 0.112		- / -		- / -		- / -		- / -		- / -		47 / 0.387							
Installation Schedule																															
	PYS	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	23	-	-	2	2	-	-	5	5	-	-	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Out	16	7	-	-	2	2	-	-	5	5	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy										Date: May 2017																					
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1										P-1 Line Item Number / Title: 0532 / H-1 Series										Modification Number / Title: 3 / H-1 AIR VEHICLE IMPROVEMENTS (OSIP 013-14)											
ID Code (A=Service Ready, B=Not Service Ready) :															MDAP/MAIS Code:																
Installation 3 of 4: Tailboom Stinger (UH-1Y/AH-1Z)																															
Manufacturer Information																															
Manufacturer Name: Depot- Tailboom Stinger															Manufacturer Location: North Carolina																
Administrative Leadtime (in Months): 1															Production Leadtime (in Months): 8																
Dates		FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022					
Contract Dates		Oct 2015				Oct 2016				Oct 2017																					
Delivery Dates		Jun 2016				Jun 2017				Jun 2018																					
Installation Information																															
Method of Implementation: Depot Field Mod Team:: Installation Name: Tailboom Stinger (UH-1Y/AH-1Z)																															
Installation Cost		Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total		FY 2019		FY 2020		FY 2021		FY 2022		To Complete		Total								
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)								
Prior Years		- / -	- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
FY 2016		- / -	15 / 0.105		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		15 / 0.105						
FY 2017		- / -	- / -		20 / 0.140		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		20 / 0.140						
FY 2018		- / -	- / -		- / -		15 / 0.109		0 / 0.000		15 / 0.109		- / -		- / -		- / -		- / -		- / -		- / -		15 / 0.109						
FY 2019		- / -	- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
FY 2020		- / -	- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
FY 2021		- / -	- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
FY 2022		- / -	- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
To Complete		- / -	- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -						
Total		- / -	15 / 0.105		20 / 0.140		15 / 0.109		0 / 0.000		15 / 0.109		- / -		- / -		- / -		- / -		- / -		- / -		50 / 0.354						
Installation Schedule																															
	PYS	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	7	8	-	-	10	10	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Out	-	-	-	7	8	-	-	10	10	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy										Date: May 2017																					
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1										P-1 Line Item Number / Title: 0532 / H-1 Series										Modification Number / Title: 3 / H-1 AIR VEHICLE IMPROVEMENTS (OSIP 013-14)											
ID Code (A=Service Ready, B=Not Service Ready) :															MDAP/MAIS Code:																
Installation 4 of 4: Cargo Door Latch (UH-1Y)																															
Manufacturer Information																															
Manufacturer Name: Depot-Cargo Door Latch															Manufacturer Location: North Carolina																
Administrative Leadtime <i>(in Months)</i> : 1															Production Leadtime <i>(in Months)</i> : 3																
Dates		FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022					
Contract Dates										Oct 2017																					
Delivery Dates										Jan 2018																					
Installation Information																															
Method of Implementation: Field Mod Team:: Installation Name: Cargo Door Latch (UH-1Y)																															
Installation Cost		Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total		FY 2019		FY 2020		FY 2021		FY 2022		To Complete		Total							
		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>		<i>Qty (Each) / Total Cost (\$ M)</i>							
Prior Years		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2016		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2017		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2018		- / -		- / -		- / -		2 / 0.040		0 / 0.000		2 / 0.040		- / -		- / -		- / -		- / -		- / -		- / -		2 / 0.040					
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2021		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
FY 2022		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -					
Total		- / -		- / -		- / -		2 / 0.040		0 / 0.000		2 / 0.040		- / -		- / -		- / -		- / -		- / -		- / -		2 / 0.040					
Installation Schedule																															
	PYS	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Out	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Footnotes: ⁽¹²⁾ Increase in FY 2018 and FY 2019 is for TRDS and Main Rotor (MR) Mast																															

UNCLASSIFIED

Exhibit P-3a, Individual Modification: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1506N / 05 / 1	P-1 Line Item Number / Title: 0532 / H-1 Series	Modification Number / Title: 3 / H-1 AIR VEHICLE IMPROVEMENTS (OSIP 013-14)
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
<p>⁽¹³⁾ FY 2016 Installation Equipment N/R required for integration engineering of required safety upgrade to aircrew restraint system in response to operational mishap. FY 2017 Installation Equipment N/R required for Tail Rotor Drive Shaft Flex Coupling Redesign. FY 2018 Installation Equipment N/R required for Environmental Control System Thermal modification and improvements/upgrades to Main Rotor Gear Box (MRGB) pump quill, rotor brake system, desiccant breather, and input quills.</p> <p>⁽¹⁴⁾ Other Support includes government engineering support for all modifications.</p>		